

ABSTRACT

Method of obtaining a transmission gain function

Method of obtaining a transmission gain function by means of an array of antennae, a signal to be transmitted by the array being weighted by a vector (\bar{b}_d) of N complex coefficients, referred to as the transmission weighting vector, N being the
5 number of antennae in the array, the array transmitting to a telecommunication terminal over a transmission channel, referred to as the downlink channel, a downlink transmission signal (S_d) and the said terminal transmitting to the said array over a transmission channel, referred to as the uplink channel, an uplink transmission signal (S_u), the said downlink channel being disturbed by an isotropic noise (N')
10 and/or a directional noise, referred to as the downlink interference (I_d), the said transmission weighting vector (\bar{b}_d) being determined by means of a matrix product from a noise power matrix (D_d) which is a function of the power of the said isotropic noise and/or of the power of the said directional noise and a vector (\bar{C}_d), referred to as the downlink channel vector, representing an angular sampling of the transfer
15 function of the downlink channel in M directions k, k=0,...,M-1, belonging to the angular range covered by the array.

Fig. 4

UD 67017 - 038673660